

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An acetabular implant, comprising:

a screw cup configured to receive an articular insert;  
screwing means ~~which~~ at a periphery or in a tropical/equatorial zone ~~(2)~~ of the cup, said screwing means are intended to be introduced into bone material of the acetabulum during a screwing action; and

a coating carried by the cup, ~~which~~ said coating ~~facilitates~~ facilitating osteointegration, or a selective calcium hydroxyapatite coating,

wherein the coating is thick on convex portions ~~(1, 10)~~ of an outer surface of the cup, including on thread bottoms of said screwing means ~~in zones or troughs or recesses of threads (10) that are left free in the screwing means,~~ and the coating has a lesser thickness, or is even absent, on screw reliefs ~~or threads (11)~~ of said screwing means.

2. (previously presented) The implant according to claim 1, wherein a thickness of the thick coating is from 100 to 200 micrometres.

3. (currently amended) The implant according to claim 2, wherein the ~~coating~~ thickness of the thick coating is of an order of  $150 \pm 35$  micrometres.

4. (previously presented) The implant according to claim 1, wherein the screw reliefs have a coating of an order of  $50 \pm 30$  micrometres.

5. (previously presented) The implant according to claim 1, wherein the screw reliefs (11) do not have any coating and have a rough surface.

6. (currently amended) The implant according to claim 1, wherein the screwing means is arranged ~~in order to traumatize as little as possible an acetabular bone site, in which the threads are introduced, and in order to have a maximum convex surface area, by having troughs (10) to have thread bottoms between sides of threads (11) in order to facilitate osteointegration, by contact osteogenesis and remodelling under stress,~~ the screw reliefs being arranged ~~in order~~ to apply a self-tapping cutting effect during the screwing action and [[an]] effect ~~involving~~ compression of ~~sponge-like~~ the bone material.

7. (currently amended) The implant according to claim 6, wherein in a thread pitch, a proportion of thread width, in a region of the ~~trough~~ thread bottom, relative to the pitch, is from 0.2 to 0.5.

8. (currently amended) The implant according to claim 1, wherein a cross-section of the threads is asymmetrical in a diametral plane, with a smaller angle of an order of from 5 to 10° at a polar side ~~(7)~~ of the thread, and a greater angle of an order of from 15 to 20° at an equatorial side ~~(8)~~, in order to bring about a good compression effect when the bone which receives the threading is placed under stress.

9. (currently amended) The implant according to claim 1, wherein crests of threads ~~(11)~~ are relieved, with a leading edge which is radially higher than a remainder of the crest, whose radial height decreases towards a rear of the thread.

10. (currently amended) The implant according to claim 9, wherein the leading edge is itself inclined, by being formed by a milling pass which is strongly inclined in a biased manner relative to an inclination of the threading itself, the leading edge ~~(12)~~ being orientated aggressively forwards relative to the radial.

11. (previously presented) The implant according to claim 1, wherein a threading pitch is regular in order to bring about a single bone groove, in which successive threads are introduced during the screwing action.

12. (currently amended) The implant according to claim 1, wherein the screwing means has a threading formed by zones of threads ~~(5)~~ which are separated by inclined grooves ~~(6)~~ defining cutting edges.

13. (previously presented) The implant according to claim 1, wherein the screwing means has a spherical threading of constant pitch.

14-17. (cancelled)

18. (currently amended) An acetabular implant, comprising:

a screw cup configured to receive an articular insert;  
threads at a tropical/equatorial zone of the cup, said threads being intended to be introduced into bone material of the acetabulum during a screwing action; and

a coating carried by the cup, said coating facilitating osteointegration, or a selective calcium hydroxyapatite coating,

wherein the coating is thick on convex portions of an outer surface of the cup, including on thread bottoms of said threads ~~in zones or troughs or recesses of the threads that are left free~~, and the coating has a lesser thickness, or is even absent, on screw reliefs ~~[[or]]~~ of the threads.

19. (previously presented) The implant according to claim 1, wherein the coating is a selective calcium hydroxyapatite coating.

20. (previously presented) The implant according to claim 18, wherein a thickness of the thick coating is from 100 to 200 micrometres.

21. (currently amended) The implant according to claim 20, wherein the ~~coating~~ thickness of the thick coating is of an order of  $150 \pm 35$  micrometres.

22. (previously presented) The implant according to claim 18, wherein the screw reliefs have a coating of an order of  $50 \pm 30$  micrometres.

23. (previously presented) The implant according to claim 18, wherein the screw reliefs do not have any coating and have a rough surface.

24. (currently amended) The implant according to claim 18, wherein the threads are ~~[[is]]~~ arranged ~~in order to traumatize as little as possible the acetabular bone site, in which the threads are introduced, and in order to have a maximum convex surface area, by having troughs~~ to have thread bottoms between sides of the threads ~~in order~~ to facilitate osteointegration, ~~by contact osteogenesis and remodelling under stress,~~ the screw reliefs being arranged ~~in order~~ to apply a self-tapping cutting effect during the screwing action and ~~[[an]]~~ effect ~~involving~~ compression of ~~sponge-like~~ the bone material.